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Research Article

Influence of Childhood Adversity on Students' Delinquent Activities: Interplay with Neighborhood Context and Delinquent Peer Association

Md. Bashir Uddin Khan and Yanwen Tang

School of Sociology and Political Science, Shanghai University, Shanghai 200444, China

Correspondence should be addressed to Yanwen Tang; t_yanwen@hotmail.com

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Juvenile delinquency is often linked with various proximal family and environmental factors during a child's upbringing. Richard Jessor's problem behavior theory (PBT) emphasizes that a combined interplay of these factors may explain this phenomenon appropriately. This study employed the PBT framework to investigate the impact of family on students' delinquency, considering the influence of neighborhood and delinquent peer association. A model was developed for analyzing the variables by structural equation modeling (SEM). Data were collected through interviews with 1026 students aged between 12 and 18 years from a child development center and eight educational institutes in Bangladesh. The findings revealed that family-level factors (adverse childhood experiences (ACEs) and family deprivation) can significantly predict students' delinquency directly and through the moderation effect of neighborhood-level variables (neighborhood social capital and neighborhood disorganization). Delinquent peer association exhibited a significant mediating role in the model. It could directly predict delinquency as well. The research has notable theoretical and practical implications for understanding the complex dynamics of family, neighborhood, and delinquent peer association in explaining students' delinquency.

1. Introduction

Juvenile delinquency is a worldwide concern at present. Assessing different predicting factors of delinquency is essential in this context to identify preventive measures and protect juveniles from engaging in delinquency. Considering multiple factors together is an excellent way to understand juvenile delinquency comprehensively. Family, neighborhood, schools, and peer groups are vital proximal environmental factors that shape the behaviors of juveniles [1]. The effects of multiple factors on delinquency can be explained by the concept of Bronfenbrenner's ecological system theory [2]. This theory posits that the surrounding environment influences children's behavioral patterns through their developmental process [3].

Studies found that adverse childhood experiences (ACEs) are one of the significant risk factors for different forms of delinquency in the family domain [4, 5]. ACEs indicate a combination of factors that create negative emotions among juveniles or children in their early life [6]. Youngsters experiencing ACEs in physical, emotional, sexual, or other forms in their childhood are likelier to engage in more delinquent activities than other juveniles who do not go through such experiences [7]. While studying the risk factors of incarcerated juveniles, studies found ACEs to be the most common factor among them [8]. Evidence shows that along with ACEs, family deprivation (another variable from the family domain), neighborhood-related factors, and peer delinquency are also interlinked with different forms of delinquent exposures [9, 10]. However, research incorporating ACEs and other associated proximal environmental factors (including family deprivation, neighborhood-level factors, and peer groups) is still limited among the students. Such studies are very limited in the Bangladeshi context as well [11–17]. The present study is an effort to address this research gap in this perspective.

Family deprivation is a feeling of disappointment due to juveniles' lesser accessibility to resources. It generally indicates how much the family members feel well-off compared to others [9]. Any feeling of deprivation in the family setup may trigger juveniles to overcome their limitations by engaging in some antisocial activities [18–20]. In this way, juveniles engage in delinquency as a coping mechanism for their lack of resources and opportunities [21]. As deprivation may create a psychological vulnerability conducive to committing delinquent activities [22], and in earlier research, deprivation factors were identified as contributing to violent juvenile misconduct [23], our present study will assess the role of family deprivation to understand students' delinquency along with other factors.

Neighborhood factors, including neighborhood disorganization and neighborhood social capital, may also contribute to juveniles' delinquent exposure [9]. These two factors are pretty opposite to each other. Neighborhood disorganization consists of crime, drug dealing, fighting, empty buildings, graffiti, and other negative characteristics in the community, which may provide juveniles with a suitable environment for committing antisocial acts. On the other hand, neighborhood social capital consists of positive attributes among the community members, including help, cohesion, trust, and friendliness [9, 24]. Juveniles living in disorganized neighborhoods get more opportunities to mix with delinquent peers due to the availability of different antisocial activities and criminogenic environments. Such communities lack informal social control, which may drive juveniles to delinquency, such as substance abuse [25], gambling [26], serious delinquency [27], violence [28], and other problem behaviors (Y. [29]). These antisocial behaviors are often committed due to more opportunities to mix with delinquent juveniles and to cope with the strain [30]. Although neighborhood disorganization seems to be a significant predictor of delinquency, empirical research on this issue is less frequent in Asian social contexts [31].

On the other hand, social capital in the neighborhood may provide juveniles with an environment full of cooperation, cohesion, trust, and mutual exchanges. It increases social commitment to avoid delinquency. In this way, high social disorganization and low neighborhood social capital may drive juveniles to commit delinquency [32, 33]. Albert Hirschman mentioned social capital as a "moral resource" that is ever-increasing as long as it is used and vice versa if not used [34, 35]. That is why social capital may work as a protective factor for juveniles, preventing them from committing delinquency.

Peer groups are another crucial factor behind juveniles' behavioral outcomes [36]. Previous studies found that association with delinquent peers may increase the probability of different forms of delinquency among youngsters [37–39]. Peer groups influence juveniles to act a certain way by providing positive and negative responses. It may have a direct and indirect effect on delinquency.

Richard Jessor's problem behavior theory (PBT) explains juveniles' delinquent exposures as a response to combined distal and proximal factors [1, 40, 41]. The distal factors predominantly work from social, political, economic, and cultural perspectives. Proximal factors, in contrast, remaining in the broader arena of distal factors, influence more closely on the juveniles. Jessor explained that family, neighborhood, school factors, and peer groups work as the most significant predictors of juveniles' particular behavioral outcomes. Although different studies have been conducted to understand various factors affecting delinquency, combining these proximal factors, namely, family-level factors (ACE and family deprivation), neighborhood-level factors (neighborhood disorganization and neighborhood social capital), and school factors/social factors (peer delinquency), was not considered together to understand the complex interplay of these variables in predicting the delinquency of students. Assessing this interplay of such factors within the framework of PBT may help us to understand multiple variables together, the combined outcome of which may reveal important insights about students' engagement in problem behaviors [42]. In this context, this study intends to fill the literature gap by assessing a combined interplay of these factors in understanding delinquency among the young students of Bangladesh.

The adoption of Richard Jessor's problem behavior theory (PBT) as a conceptual framework for the present research was done considering its merits and demerits. PBT is mainly used in understanding minors' delinquent exposure as an outcome of multilayered problems. This theory stated a model to indicate how individual problem behaviors result from their socialization process. According to the explanation, juveniles' delinquent exposures receive their dynamics with the interaction between different protective and risk factors. Thus, this framework provides a valuable lens to understand the complex interplay of family, neighborhood, and peer influence on minors' behavioral problems, including delinquent exposures [40, 41, 43, 44]. However, this theoretical understanding still has limitations from varied aspects. Its applicability in different cultural contexts is not yet verified for its wide acceptance [40, 45]. Some other scholars may also argue that it may not be able to focus on the complex interplay of different factors that it was expected to cover. Despite the limitations, the present study used structural equation modeling and a sample of 1026 students to understand how much the proximal factors within the theoretical framework can explain the delinquency of Bangladeshi students. This effort may provide valuable insights to the academia to have a more critical discourse about its applicability in the South Asian perspective.

Previous studies on delinquencies among Bangladeshi adolescents predominantly focused either on a specific individual or environmental factors distinctly or did not support the claims by rigorous quantitative data [11–17]. In contrast, researches from other countries, such as studies by Jin et al. [46], Kokoravec et al. [47], Jiang et al. [48], Winters [49], Gibson et al. [50], and Xu et al. [51], highlight the importance of considering multiple factors together to get a deeper understanding of their connectedness with delinquency. Unlike the global-level studies, previous studies of Bangladesh inadequately focused on the comprehensive assessment of multiple factors using a framework that can simultaneously assess such a combination of factors. Addressing

this research gap, we tried to understand adolescent students' delinquency propensity based on comprehensive proximal environmental factors with the framework of PBT.

2. Review of Literature and Hypothesis Development

2.1. Adverse Childhood Experiences (ACEs) and Delinquency. ACEs indicate traumatic exposures of juveniles to some negative experiences during their early childhood [52–54]. Such ACEs are associated with their health and well-being. Both males and females are affected by the adverse effects of ACE in their later life [55–57]. Research also indicates that high-risk juvenile offenders are likely to be more exposed to traumatic incidents. Fox et al. [58] revealed a relationship between ACEs and serious, violent, and chronic delinquency among minors in this context. After analyzing many high-risk juvenile offenders, Baglivio and Epps [59] found that only a few juveniles who engaged in delinquent activities were exposed to no adversity in their early life; the rest experienced at least one adversity in their lives.

Interrelationships between the components of ACEs among different offenders are also found in many studies [59]. Recent studies also support the association between other variables along with the components of ACEs and various delinquent behaviors of juveniles [7, 60–67]. In many cases, different researchers used a composite ACE score to more precisely analyze the relationship between ACE score and different forms of delinquency [68]. Increased ACEs or ACE scores significantly lower juveniles' "self-control." Self-control generally keeps them away from different delinquent involvement [69]. Such loss of self-control due to adversity may lead youngsters to delinquency. Research also indicates that childhood adversity may trigger juveniles to join gangs and thus associate with delinquent peers [70]. Therefore, based on prior studies, we hypothesize the following for our present study:

H1. ACE score has a positive association with students' delinquency.

H1a. The relationship between ACE score and students' delinquency is positively mediated by peer delinquency.

2.1.1. Neighborhood Social Capital as Moderator between ACEs and Delinquency. Social capital is generally considered as connectedness among different people in society and is an indicator of the well-being of people [71]. Bourdieu [72] saw social capital as an individual's property that allows a person to exert influential power over others. It also helps a person to achieve good positions and other influential benefits [73]. It keeps people well connected to a structural relationship that may balance their lifestyle by facilitating specific tasks and mutual responsibilities [74, 75]. Social relationships and resource benefits are two crucial components featuring social capital that help everyone to achieve socially approved goals through socially accepted means [76]. Bourdieu [72], Coleman [74], Putnam [77], Lin et al. [78], and Häuberer and Jeřábek [79] tended to provide a measurable approach to social capital to understand its impact on different variables. Social capital evolves through various network ties among individuals and collectives; in this way, it provides access to resources and facilitates expressive and instrumental actions [79]. Recent youth-related researchers are interested in incorporating the concept of social capital to understand its multifaceted influence on different behavioral outcomes [9, 80, 81]. Binik et al. [9] found a negative correlation between neighborhood social capital and delinquency but did not specify any statistical coefficient in their study. Williams et al. [82] also found that social capital is negatively associated with all major and minor delinquency in Turkey. In the same way, Hoffmann and Dufur [83] found family social capital as a protective factor for youths and negatively associated with delinquency.

Thus, numerous studies independently established that adversity is associated with an increased delinquency rate and neighborhood social capital is associated with a reduced delinquency rate [84]. The reason can be understood from the study of Barton et al. [85] that social capital in different forms is associated with greater prosocial behaviors. These prosocial behaviors eventually promote ethical guidelines and reduce delinquency. However, a substantive research gap still exists in academia on how these two vital factors intersect to explain delinquency. In the present study, we consider social capital only at the neighborhood level to see whether this social capital can work as a moderator between ACE score and delinquency. We aim to contribute deeper insights into the complex interaction of these factors to understand community support and their development trajectory toward delinquency. Based on the prior studies, we assume it will negatively moderate the relationship between ACE score and delinquency. Thus, our proposed hypothesis is as follows:

H1b. Neighborhood social capital negatively moderates the relationship between ACE score and delinquency.

2.2. Family Deprivation and Delinquency. Family-level factors have been identified as a significant element in comprehending juvenile delinquency. Juveniles who live in a warm family environment become more law-abiding [86]. Winnicott et al. [87] state that juveniles drive for their stability outside of their family once the family fails to fulfill their needs and requirements. People search for peace among their relatives, peers, and schools after their families. Sampson and Laub [88] showed that family deprivation by inhibiting informal social control increases the probability of juveniles' deviant attitudes. They also found evidence that the fragile relationship between youths and their parents, poverty, and lack of proper supervision may lead youngsters to delinquency.

Pratt and Cullen [89] identified poverty as one of the leading causes of juvenile delinquency in their meta-analysis. It happens because poverty is liable for creating deprivation among minors, and they often cross the limit of social acceptance to deal with that deprivation [90]. Jarjoura et al. [91] analyzed the association between poverty and delinquency, and they found that living in poverty and remaining there for a considerable amount of time increases the probability of their involvement in delinquency. The reason is that poverty generally gives them a sense of

deprivation. Hay et al. [92] found similar findings that living in a neighborhood where children feel deprived due to their underprivileged situation may drive them to delinquency outbreaks.

In the same way, Chuang et al. [31] demonstrated that poor people living in wealthy areas may generate negative emotions among them. This emotional breakdown is sometimes connected to delinquency as a coping mechanism for their inner feeling of deprivation [93]. Based on the vital influence of family and sense of deprivation on the behavioral outcome of juveniles, we assume that family deprivation may lead the students to expose delinquent behaviors. Hence, our hypothesis in this regard is as follows:

H2. Family deprivation positively affects students' delinquency.

2.2.1. Neighborhood Disorganization as a Moderator between Family Deprivation and Delinquency. Neighborhood disorganization indicates the presence of factors that are quite opposite to neighborhood social capital. Neighborhood disorganization with the presence of crime, drug dealing, fighting, empty buildings, or graffiti in the community often provides juveniles an opportunity to be involved in antisocial activities or feel less sensitive to such behaviors [9]. A substantial body of literature provides us with the support that neighborhood disorganization is positively associated with delinquency [94–100]. As evidence supports that family deprivation may be associated with delinquent exposures, our present hypothesis states that when adolescents face family deprivation and go through neighborhood disorganization, that may intensify their delinquent behaviors. As very few studies were conducted to understand the intersection of family deprivation and neighborhood disorganization, our present hypothesis is aimed at understanding this trajectory. Thus, we assume that neighborhood disorganization as a moderator may intensify family deprivation-led delinquency. Therefore, we propose the following hypothesis in this regard:

H2a. Neighborhood disorganization positively moderates the relationship between family deprivation and delinquency.

2.3. Neighborhood Disorganization and Delinquency. Neighborhood factors help community members to align with societal norms. Since the beginning of the 20th century, researchers have devoted themselves to identifying different environmental or ecological factors associated with communities that make any neighborhood "safer" or "not safer" than other neighborhoods [9]. If the neighborhood has high social cohesion and reasonable informal social control, the parents can control their children in a healthy way [24, 101]. It further keeps their children law-abiding. Conversely, Shaw and Mckay [102] identified that problematic neighborhood lacks strong social bond, harmony, and collaboration among the members. Such neighborhoods associated with drug abuse, physical decay, prostitution, and other negative factors may not ensure proper informal social control to regulate the behaviors of the juveniles of that locality [27].

Byrnes et al. [27] also found that disorganized neighborhoods promote delinquency due to improper controlling mechanisms. Social disorganization indicates such a situation in the neighborhood where the residents of a particular community fail to have sufficient control over the behavior of people [27, 102]. Lower socioeconomic status in the neighborhood is a symptom of neighborhood disorganization that creates adolescent problem behavior [103]. Juveniles living in disorganized neighborhoods are also found to be vulnerable to undertaking gang membership and committing property crimes [104]. However, the association of Bangladeshi students' neighborhood disorganization and their delinquent exposure is still understudied. We assume that such association may exist in the present study area and delinquent peer association may mediate this relationship. Hence, based on the above points for addressing the study gap, we propose the following hypotheses:

H3. Neighborhood disorganization positively affects students' delinquency.

H3a. The relationship between neighborhood disorganization and students' delinquency is positively mediated by peer delinquency.

2.4. Delinquent Peer Association as a Predictor of Delinquency. The term "peer" indicates "social equals" who have a good relationship with each other to pass the time together for a substantial amount of time [105]. The influence of these peer groups is known as "peer influence" or "peer networks" [106]. Such peer influence is also causally connected to juveniles' behavioral patterns. As delinquency is often found as a group activity, peer influence significantly affects juveniles' delinquent activities. Warr [105] described delinquency as a function embedded within peer groups. In many cases, juveniles are also influenced by their friends of close friends with whom they rarely meet. Evidence is also found that when juveniles commit any delinquent acts, they are associated with their peer groups in most cases [107]. Warr [105] also found that delinquent behaviors are predominantly related to social behavior within a group.

Adolescents' usual relationship with their parents affects the activities of their peer groups [108]. Minors are conditioned preliminarily by their families and environment during their socialization process. Juveniles brought up in a chaotic environment may mix with delinquent peers later in their lives [109]. In such a way, juveniles who face ACEs have a greater probability of associating with delinquent peers as a coping mechanism for the trauma [110]. ACEs create antisocial tendencies that may aid them to be aligned with peers with similar traits of antisocial tendencies. In such a behavioral selection process, juveniles who experience childhood adversity tend to mix with delinquent peers through the mediating role of antisocial behavioral adaptation [111].

Laser et al. [112] mentioned that a lower level of safety in disorganized neighborhoods might increase juveniles' greater engagement in delinquency. Such disorganized neighborhood provides an environment suitable for delinquency by providing unsupervised gatherings of teenagers where interaction with certain peers can lead to delinquent behavior [30, 113]. In this way, disorganized neighborhoods amplify the opportunity to mingle with delinquent peers. In

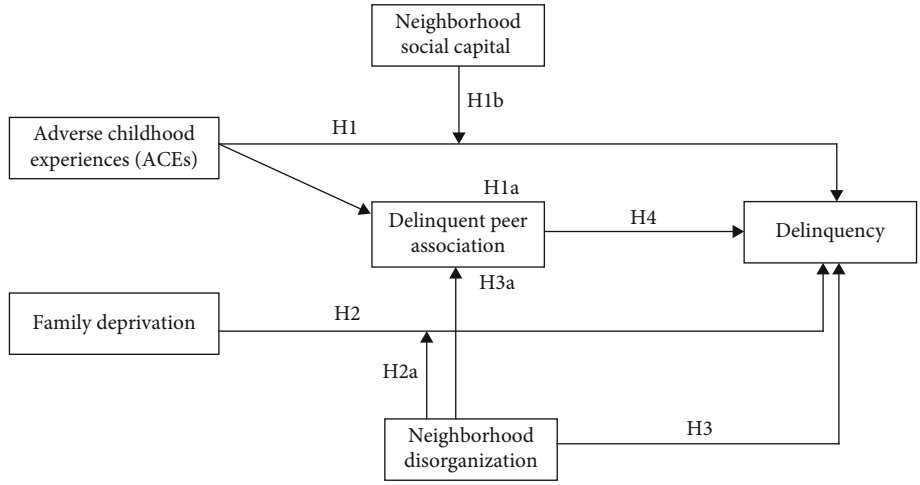

Figure 1: Conceptual model of the study.

many cases, juveniles' activities can be considered gang activity, although they might not subscribe to any membership to any such group. Curiosity and familial context, while combined with peer delinquency, are prevalent as determining factors for juveniles' delinquent involvement [102, 114–131].

Although many studies have been conducted in different contexts and evidence was also found supporting the influence of peer groups on delinquency, Park et al. [132] stated that school-based studies are still minimal. We assume that at the school level, peer delinquency may also positively affect delinquency and propose our hypothesis as the following:

H4. Delinquent peer association positively affects students' delinquency

Based on the previous discussion and all formulated hypotheses, the proposed conceptual model of the present study is presented in Figure 1.

2.5. Theoretical Framework. Richard Jessor's problem behavior theory (PBT) gives us a comprehensive framework to explain students' delinquent behaviors (problem behavior) based on multifaceted domains. This theoretical framework can simultaneously consider various social, environmental, and psychological factors to understand their complex interrelationship in explaining delinquency [41].

In line with this framework, we may postulate that delinquency, a problem behavior, is influenced by different individual, family, peer, and community factors [40]. According to the concept of PBT, ACEs and family deprivation are two family-level factors that individually affect juvenile students, which may trigger delinquency. ACEs indicate the traumatic events the minors face during their childhood, and family deprivation means their perceived economic hardship. These factors are likely to stimulate delinquency, as per the explanation. Similarly, neighborhood factors include neighborhood social capital incorporating help, trust, cohesion, and neighborhood connectedness [9]. According to the framework of this theory, this neighborhood social capital acts as a protective factor that keeps juveniles away from delinquency.

Another neighborhood-level variable, neighborhood disorganization (risk factor), includes crime, drug dealing, fighting, and other negative community characteristics [9]. According to this theory, the level of delinquency among the members of peer groups is also relevant as a proximal factor in understanding delinquency [1]. As per the theoretical framework, it is quite rational to consider this factor to have a mediating role in explaining delinquency in the present model. Structural equation modeling allows us to understand these multifaceted factors and their interactions to understand the rationality of this theoretical model. In summary, it can be said that Richard Jessor's PBT provides us with a robust theoretical framework to comprehensively understand the complex dynamics of associated factors.

2.6. Underlying Assumptions for the Model Construction. We have considered several assumptions for constructing our model for the present study. As we used SmartPLS version 3 software for partial least squares structural equation modeling (PLS-SEM), these assumptions helped us to represent the variables accurately and to interpret them quite meaningfully. The assumptions that we have considered in our present study are as follows:

Linearity: we assume that the relationships between the variables are linear. That indicates that changes in one variable cause proportional changes in another variable. Although we recognize that nonlinear relationships between variables might exist in the real world, for the present study, we assumed that the relationships are linear.

Independence: we assume that the variables used here are mutually exclusive and independent of each other. We also address that there is no issue of multicollinearity. So, the prediction might not be overlapping.

Normality: we have used PLS-SEM for data analysis, where no assumption of normality is essential [133]. We assume that our model will explain the relationship of variables irrespective of any normality condition.

Homoscedasticity: we assume that the variance of the errors is constant throughout all independent variables. This

Table 1: Sociodemographic characteristics of the respondents ($N = 1026$).

		Frequency	Percent	Valid percent	Cumulative percent
Age groups	12 to 14 years	403	39.3	39.3	39.3
	15 to17 years	567	55.3	55.3	94.5
	18 years	56	5.5	5.5	100.0
Sex	Female	412	40.2	40.2	40.2
	Male	614	59.8	59.8	100.0
Religion	Islam	958	93.4	93.4	100.0
	Others	68	6.6	6.6	6.6
	Total	1026	100.0	100.0	
Family type	Nuclear	852	83.0	83.0	83.0
	Joint or extended	174	17.0	17.0	100.0
Household size	3 to 4	552	53.8	53.8	53.8
	5 to 6	359	35.0	35.0	88.8
	More than 6	115	11.2	11.2	100.0
Perceived economic condition	Poor	22	2.1	2.1	2.1
	Below the average	81	7.9	7.9	10.0
	Average	871	84.9	84.9	94.9
	Above the average	44	4.3	4.3	99.2
	Wealthy	8	.8	.8	100.0

assumption indicates the accuracy of the model's prediction across a range of predictor variables.

No autocorrelation: we have assumed that for the present analysis, no autocorrelation exists. It indicates that our observations are independent of each other across time.

Temporal order: we have considered that the independent variables came first, which caused the dependent variables. Therefore, our model respected the temporal order, ensuring that causes precede effects, particularly in investigating family and neighborhood factors in understanding the delinquency of students.

By addressing the assumptions mentioned above, we employed PLS-SEM analysis to achieve valuable insights into the complex dynamics of childhood adversity, family deprivation, delinquent peer association, neighborhood social capital, and neighborhood disorganization in understanding the delinquency of students in Bangladesh.

3. Materials and Methods

3.1. Design and Settings. The present study collected data from 1026 students selected from eight educational institutes in two central districts of Bangladesh. Data were also collected from one juvenile rehabilitation center called the "child development center," where the students arrived no earlier than two months before interviewing. The age of the respondents ranged from 12 to 18 years.

3.2. Participants and Sampling. All the participants from whom we collected data were enrolled in grades 8 to 12. We used nonprobability purposive sampling for the purpose. A self-report questionnaire was administered there, and relevant instructions were provided to the respondents before the data collection. We collected data between 2019 and February 2020. The sample size fulfilled the statistical prerequisite for partial least squares structural equation modeling ($N = 1026$).

3.3. Demography. This present study included six demographic variables. These are age, sex, religion, type of family, household size, and perceived economic condition of the respondent's family. Data were postcoded into three categories after collecting data for age. For the sex, a dichotomous variable was used (0 for females and 1 for males). A dichotomous variable was also used for religion (0 was for all religions other than Islam and 1 for Islam). The type of family included two options (1 is for nuclear family and 2 is for joint or extended family). The number of family members was collected and later categorized into three. For perceived economic condition, we adopted the options used by Gao et al. [10], including options from poor to wealthy, denoting 1 for poor and 5 for wealthy. Table 1 presents the age group of juveniles. Most of their (55.3%) ages ranged from 15 to 17 years. Less (39.3% and 5.5% consecutively) were aged 12 to 14 years and above 17. Most of these respondents were males and Muslims. Most of these juveniles came from nuclear families (83%). Most of their perceived economic condition was average. Most respondents' household size remains in the range of 3 to 4 (Table 1).

3.4. Measures

3.4.1. Measuring ACE Score. In the present study, we used the ACE score to understand students' adversity, which was measured by the previous 10-item scale developed by

Felitti et al. [6]. This scale was a dichotomous one, denoting 1 for yes and 0 for no for all responses of a particular respondent about their adverse experiences during the first 18 years of their age. Thus, a summated score was created to make an ACE score for each respondent. This ACE score for each individual indicates the level of adversity during their first 18 years of age. The score might range from 0 (having no adversity) to 10 (having all adverse experiences), where a higher score denotes a higher level of delinquency (Table 2).

3.4.2. Measuring Family Deprivation. Family deprivation is a single-item construct previously used by Binik et al. [9]. A Likert scale was used to measure the construct by asking, "How well-off is your family compared with others?". A 7-point Likert scale range from 1 (much better-off) to 7 (much worse-off) was used to get the answer to that question (Table 2).

3.4.3. Measuring Social Capital at the Neighborhood Level. We adopted a 4-item scale of Binik et al. [9] to understand social capital at the neighborhood level. Here, questions were asked about the perception of their neighbors' help, cohesion, trust, and friendliness. Participants were requested to indicate their level of agreement with each statement using a Likert-type response format consisting of four points, ranging from disagree fully (scored as 1) to agree fully (scored as 4) (Table 2). Higher scores indicate higher levels of neighborhood social capital and vice versa.

3.4.4. Measuring Neighborhood Disorganization. We utilized a 5-item scale developed by Binik et al. [9] to measure the perception of neighborhood disorganization. The items encompassed questions regarding the presence of high crime levels, drug dealing, fighting with each other, graffiti, and abandoned buildings in the neighborhood of juveniles. We employed a four-point Likert-type response format for the responses from disagree fully (scored as 1) to agree fully (scored as 4). Higher scores indicate a higher prevalence of each item (Table 2).

3.4.5. Measuring Peer Delinquency. In the present study, we used the scale that was used by Gao et al. [10]. Therefore, we used 18 different items for measuring peer delinquency, measured by a 3-point scale (1 = none of them, 2 = a few of them, and 3 = most of them) where a higher summated score indicates a higher level of deviance among respondents' peer group. For our study, we divided these 18 items into five subscales to understand different types of delinquency among peers and compared those behaviors with the respondents' delinquency, according to Gao et al. [10]. The adopted and adjusted subscales were divided into underage acts (PUA) (playing truancy, running away from home, loitering during midnight, going to an Internet café, cheating in exams, and reading pornographic materials/watching such contents), substance abuse (PSA) (drinking alcohol and smoking cigarettes), violent delinquency (PVD) (carrying weapons, fighting, bullying, and extortion), property delinquency (PPD) (stealing, damaging property, and gambling), and peer punishment (PP) (punished by teachers, punished by the school authority, and arrested by police). Scores were summated within these subgroups. Later, these subgroups were used as indicators of the construct of peer delinquency (Table 2).

3.4.6. Measuring Delinquency. Gao et al. [10], in their study regarding peer delinquency and delinquent exposure, used a 27-item scale adopted and corrected from Arnold [134] and Elliott and Ageton [135]. They adopted the scale with a little correction. This scale had a good internal consistency ($\alpha = 0.92$), and it included four subscales or subcategories, namely, underage acts (UA), substance abuse (SA), violent delinquency (VD), and property delinquency (PD) [10]. The scale was corrected and approved in the paper of Gao et al. [10], and in the present research, we included 25 items under the four subscales mentioned in the following measured by a 5-point scale (scoring from never (scored as 1) to always (scored as 5). Therefore, for the subscale underage acts, we considered playing truancy, running away from home, loitering during midnight, going to an Internet café (or using the Internet alone without permission of guardians), buying alcohol or cigarettes, cheating on exams, reading or watching pornographic materials, and driving car/motorcycle without a license. For the substance abuse subscale, we included drinking alcohol, getting drunk, smoking cigarettes, and taking illegal drugs. For violent delinquency subscale, our items were carrying weapons, fighting, insulting other students, extortion, insulting parents, and hitting parents. For property delinquency, our items were taking money from home without parents' permission, stealing, shoplifting, painting graffiti, damaging property, and gambling. Thus, we used a 25-item scale to understand the delinquent exposure of the juveniles in this study by dividing them into four subscales. We summated the scores within subscales, and each of the subscales was used as items for the construct "delinquency" (Table 2).

4. Results

4.1. Descriptive Analysis. Table 3 reports the study variables, including their respective subscales and items where subscales were not used. This table presents all the variables' or items' means (M), standard deviations (SD), and correlation matrix of study variables. ACE score represents the cumulative measure of all adverse childhood experiences of the respondents here. Family deprivation is a single-item scale where no summation is required. In the neighborhood domain, composite scores were not made for neighborhood social capital and neighborhood disorganization. For delinquent peer association and delinquency, the table encompasses all subscales with their corresponding composite scores.

4.2. Reliability and Validity Analyses. For the present analysis of the model, reliability and validity were assessed for the measurement model in the first step before going to the structural model analysis. For determining the construct reliability, Cronbach's alpha coefficients and composite reliability (CR) values for all constructs were measured where all the corresponding values crossed the threshold value of

Table 2: Items of the constructs and corresponding questions used in the study.

Attitude measuring scale reference	Subscales/sum scores	Items	Question description
ACE score [6]	ACE score	ACE1	"Did a parent or other adult in the household often Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?"
		ACE2	"Did a parent or other adult in the household often … Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured?"
		ACE3	"Did an adult or person at least 5 years older than you ever… Touch or fondle you or have you touch their body in a sexual way? or Try to or actually have oral, anal, or vaginal sex with you?"
		ACE4	"Did you often feel that … No one in your family loved you or thought you were important or special? or Your family did not look out for each other, feel close to each other, or support each other?"
		ACE5	"Did you often feel that … You did not have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?"
		ACE6	"Were your parents ever separated or divorced?"
		ACE7	"Was your mother or stepmother: Often pushed, grabbed, slapped, or had something thrown at her"
		ACE8	"Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?"
		ACE9	"Was a household member depressed or mentally ill or did a household member attempt suicide?"
		ACE10	"Did a household member go to prison?"
Neighborhood social capital [9]	SC score	SC1	"Are people around here willing to help their neighborhood? (HELP)"
		SC2	"Is this a close-knit neighborhood? (COHESION)"
		SC3	"Can people in this neighborhood be trusted? (TRUST)"
		SC4	"Do people in the neighborhood generally get along well with one another? (FRIENDLINESS)"
Neighborhood disorganization [9, 136]	ND score	ND1	"There is a lot of crime in my neighborhood"
		ND2	"There is a lot of drug dealing in my neighborhood"
		ND3	"There is a lot of fighting in my neighborhood"
		ND4	"There is a lot of graffiti in my neighborhood"
		ND 5	"There are a lot of empty and abandoned buildings in my neighborhood"
Family deprivation [9]	FD score	FD	"How well-off is your family, compared with others?"

Table 2: Continued.

Attitude measuring scale reference	Subscales/sum scores	Items	Question description
Peer delinquency [10]	Underage acts (PUA score)	PD1	"Playing truancy"
		PD2	"Running away from home"
		PD3	"Loitering during midnight"
		PD4	"Going to internet café"
		PD 5	"Cheating in exams"
	Substance abuse (PSA score)	PD6	"Reading pornographic materials"
		PD7	"Drinking Alcohol"
		PD8	"Smoking cigarettes"
	Violent delinquency (PVD score)	PD9	"Carrying weapons"
		PD10	"Fighting"
		PD11	"Bullying"
		PD12	"Extortion"
	Property delinquency (PPD score)	PD13	"Stealing"
		PD14	"Damaging property"
		PD15	"Gambling"
	Punished by school authority (PP score)	PD16	"Punished by teachers"
		PD17	"Punished by school authority"
		PD18	"Arrested by police"
Delinquent behavior [10]	Underage acts (UA score)	DEL1	"Playing truancy"
		DB2	"Running away from home"
		DB3	"Loitering during midnight"
		DB4	"Going to internet café"
		DB5	"Buying alcohol or cigarettes"
		DB6	"Cheating on exams"
		DB7	"Reading pornographic materials"/ watching pornographic contents
	Substance abuse (SA score)	DB8	"Driving a car without license"
		DB9	"Drinking alcohol"
		DB10	"Getting drunk"
		DB11	"Smoking cigarettes"
		DB12	"Taking illegal drugs"
	Violent delinquency (VD score)	DB13	"Carrying weapons"
		DB14	"Fighting"
		DB15	"Insulting other people"
		DB16	"Bullying other students"
		DB17	"Extortion"
		DB18	"Insulting parents"
		DB19	"Hitting parents"
	Property delinquency (PD score)	DB20	"Taking money from home" "without parents' permission
		DB21	"Stealing"
		DB22	"Shoplifting"
		DB23	"Painting graffiti"
		DB24	"Damaging property"
		DB25	"Gambling"

0.70, displaying a good internal consistency reliability [137, 138]. The constructs' convergent validity was evaluated by examining the average variance extracted (AVE) and outer loadings. All AVE values were above the recommended threshold value of 0.50, indicating that the constructs have good convergent validity [137, 138]. All outer loadings

Table 3: Descriptive statistics and correlation matrix of study variables.

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ACE score	1.10	1.44																				
2	Family deprivation score	3.15	1.36	0.19**																			
3	SC-help	3.08	0.64	-0.19**	-0.12**																		
4	SC-cohesion	2.89	0.75	-0.18**	-0.15**	0.46**																	
5	SC-trust	2.80	0.84	-0.26**	-0.11**	0.42**	0.47**																
6	SC-friendliness	2.95	0.82	-0.21**	-0.14**	0.40**	0.44**	0.54**															
7	ND-crime	2.35	0.91	0.19**	0.04	-0.12**	-0.11**	-0.13**	-0.11**														
8	ND-drug dealing	2.31	1.01	0.16**	0.05	-0.09**	-0.11**	-0.19**	-0.12**	0.57**													
9	ND-fighting	2.20	0.94	0.20**	0.12**	-0.13**	-0.11**	-0.15**	-0.13**	0.54**	0.52**												
10	ND-graffiti	2.24	1.06	0.13**	-0.02	0.00	0.00	-0.03	0.00	0.30**	0.21**	0.29**											
11	ND-empty building	1.71	0.92	0.15**	0.02	0.00	0.03	-0.04	-0.02	0.16**	0.20**	0.21**	0.24**										
12	Peer underage act	8.89	2.32	0.34**	0.06	-0.13**	-0.15**	-0.14**	-0.11**	0.23**	0.19**	0.19**	0.20**	0.13**									
13	Peer substance abuse	2.79	1.04	0.31**	0.06	-0.10**	-0.12**	-0.12**	-0.09**	0.20**	0.21**	0.17**	0.08**	0.10**	0.61**								
14	Peer violent delinquency	5.41	1.64	0.33**	0.04	-0.09**	-0.06	-0.12**	-0.04	0.22**	0.16**	0.25**	0.24**	0.15**	0.65**	0.58**							
15	Peer property delinquency	3.90	1.22	0.28**	0.06	-0.09**	-0.09**	-0.12**	-0.10**	0.20**	0.19**	0.21**	0.19**	0.10**	0.51**	0.49**	0.54**						
16	Peer punishment	4.74	1.16	0.28**	0.03	-0.08*	-0.03	-0.06*	-0.01	0.18**	0.15**	0.18**	0.23**	0.12**	0.59**	0.45**	0.57**	0.45**					
17	Underage score	10.28	3.33	0.41**	0.12**	-0.13**	-0.10**	-0.12**	-0.08*	0.21**	0.16**	0.23**	0.13**	0.16**	0.50**	0.43**	0.43**	0.36**	0.37**				
18	Substance abuse score	4.45	1.44	0.33**	0.11**	-0.17**	-0.09**	-0.13**	-0.10**	0.12**	0.09**	0.18**	0.06	0.13**	0.28**	0.42**	0.31**	0.24**	0.18**	0.63**			
19	Violent delinquency score	8.54	2.44	0.46**	0.13**	-0.16**	-0.13**	-0.18**	-0.12**	0.17**	0.12**	0.24**	0.16**	0.13**	0.42**	0.36**	0.48**	0.38**	0.33**	0.65**	0.55**		
20	Property delinquency score	7.80	2.51	0.36**	0.14**	-0.13**	-0.09**	-0.13**	-0.07*	0.12**	0.12**	0.17**	0.12**	0.06*	0.37**	0.32**	0.32**	0.42**	0.32**	0.53**	0.46**	0.55**	

$N = 1026$. $^{*}p < 0.05$ and $^{**}p < 0.01$. SC = neighborhood social capital; ND = neighborhood disorganization. All delinquent peer association subscales and peer delinquency subscales indicate their indicators' summated scores.

Table 4: Construct reliability and convergent validity.

Constructs	Items	Convergent validity		Construct reliability	
		Loadings	AVE	Cronbach's alpha	CR
ACEs	ACE score	1	1	1	1
Family deprivation	Family deprivation (FD)	1	1	1	1
Neighborhood disorganization	Crimes in neighborhood (ND1)	0.843	0.692	0.779	0.871
	Drug dealing in neighborhood (ND2)	0.806			
	Fighting in neighborhood (ND3)	0.846			
Neighborhood social capital	Help (SC1)	0.776	0.588	0.77	0.851
	Cohesion (SC2)	0.747			
	Trust (SC3)	0.807			
	Friendliness (SC4)	0.736			
Delinquent peer association	Peer underage act (PUA) score	0.854	0.638	0.857	0.898
	Peer substance abuse (PSA) score	0.793			
	Peer violent delinquency (PVD) score	0.847			
	Peer property delinquency (PPD) score	0.745			
	Peer punishment (PP) score	0.75			
Delinquency	Underage act score	0.866	0.672	0.837	0.891
	Substance abuse score	0.795			
	Violent delinquency score	0.854			
	Property delinquency score	0.76			

Table 5: Indicator item cross-loadings for discriminant validity analysis.

	ACE	FD	ND	SC	PeerDel	DEL
ACE score	**1.000**	0.190	0.220	-0.275	0.390	0.482
Family deprivation (FD)	0.190	**1.000**	0.086	-0.162	0.061	0.150
Crimes in neighborhood (ND1)	0.187	0.036	**0.843**	-0.153	0.260	0.192
Drug dealing in neighborhood (ND2)	0.160	0.051	**0.806**	-0.167	0.226	0.152
Fighting in neighborhood (ND3)	0.197	0.119	**0.846**	-0.168	0.252	0.254
Help (SC1)	-0.190	-0.121	-0.137	**0.776**	-0.123	-0.178
Cohesion (SC2)	-0.184	-0.146	-0.133	**0.747**	-0.119	-0.127
Trust (SC3)	-0.258	-0.105	-0.182	**0.807**	-0.144	-0.171
Friendliness (SC4)	-0.210	-0.136	-0.143	**0.736**	-0.091	-0.117
Peer underage act (PUA) score	0.344	0.057	0.246	-0.176	**0.854**	0.484
Peer substance abuse (PSA) score	0.312	0.056	0.232	-0.143	**0.793**	0.469
Peer violent delinquency (PVD) score	0.327	0.043	0.257	-0.106	**0.847**	0.477
Peer property delinquency (PPD) score	0.285	0.060	0.241	-0.132	**0.745**	0.423
Peer punishment (PP) score	0.284	0.026	0.207	-0.066	**0.750**	0.373
Underage act score	0.410	0.116	0.243	-0.143	0.526	**0.866**
Substance abuse score	0.334	0.112	0.159	-0.168	0.362	**0.795**
Violent delinquency score	0.462	0.128	0.222	-0.195	0.497	**0.854**
Property delinquency score	0.361	0.138	0.167	-0.145	0.438	**0.760**

Bold values in the table indicate the individual loadings of all indicators (items), or subscales (utilized as indicators) for a specific construct.

varied from 0.736 to 1, showing that all indicators correlate well with the corresponding constructs and that all values have surpassed the required threshold value of 0.70 [137, 138] (Table 4). Two items were removed from the construct, neighborhood disorganization (ND-graffiti and ND-empty building) due to their lower factor loadings than the threshold values.

For the discriminant validity, Table 5 shows the cross-loadings of each indicator for all constructs. All indicators loaded more strongly with their corresponding constructs

Table 6: Discriminant validity (Fornell-Larcker criterion).

	1	2	3	4	5	6
(1) ACE score	*1.000*					
(2) Delinquency	0.482	*0.820*				
(3) Family deprivation	0.190	0.150	*1.000*			
(4) Neighborhood disorganization	0.220	0.245	0.086	*0.832*		
(5) Delinquent peer association	0.390	0.560	0.061	0.297	*0.799*	
(6) Neighborhood social capital	-0.275	-0.199	-0.162	-0.195	-0.158	*0.767*

Note: values in italics represent the square root of AVE.

Table 7: Path coefficients.

Hypotheses	Path	β	t statistic	p values	Decisions
H1	ACE score -> delinquency	0.240	6.464	<0.001	Supported
H2	Family deprivation -> delinquency	0.051	2.213	0.027	Supported
H3	Neighborhood disorganization -> delinquency	0.044	1.831	0.067	Not supported
H4	Delinquent peer association -> delinquency	0.423	14.619	<0.001	Supported

than with other constructs, providing evidence of discriminant validity. Table 6 shows the Fornell-Larcker criterion to assess discriminant validity. The values of each column head indicate that they are the highest among all the column values. It demonstrates that all constructs met the criterion, with the square root of the AVE for each construct exceeding the correlations between a particular construct and other constructs in the model [137, 138].

4.3. Structural Model. Table 7 shows the results of the structural equation modeling analysis for understanding the direct association of different variables with delinquency. The path coefficients between the variables are all statistically significant at the $p < 0.05$ level other than one path (neighborhood disorganization to delinquency). Data indicate that most of the proposed paths are significant. The R^2 values for the endogenous variables, namely, delinquent peer association and delinquency, are 0.199 (low) to 0.422 (moderate) consecutively. These values indicate that the proportions of the total variance of these two endogenous variables can be explained by other exogenous variables for the present model [137, 138]. All the constructs are positively associated with delinquency other than social capital, which is negatively associated with delinquency. The predictive relevance (Q^2) values for the endogenous constructs are 0.269 for delinquency and 0.124 for peer delinquency. As Q^2 values for both of these endogenous constructs are more than 0, it indicates that the model has a good predictive power [137, 138]. SRMR (standardized root mean square residual) values that Henseler et al. [139] introduced as a goodness of fit measure for PLS-SEM can help to understand model fit for this analysis. A value less than 0.10 or 0.08 (in a more conservative version) [140] can be said that the model structure is well specified. In our study, both saturated and estimated models show values of 0.055 and 0.054 consecutively that fall within the acceptable range. These values indicate a good model fit for the present analysis.

4.4. Analysis of Results. We analyzed the SEM using SmartPLS 3 (v.3.2.8) and used the PLS algorithm and bootstrapping to get β, t-values, and p values, respectively, to understand the relationship between or among different variables (Figure 2). We got the relationship between ACE score and individual delinquency (H1: $\beta = 0.240$, $t = 6.464$, $p < 0.001$), the relationship between family deprivation and delinquency (H2: $\beta = 0.051$, $t = 2.213$, $p = 0.027$), the relationship between neighborhood disorganization and delinquency (H3: $\beta = 0.044$, $t = 1.831$, $p = 0.067$), and the relationship between delinquent peer association and delinquency (H4: $\beta = 0.423$, $t = 14.619$, $p < 0.001$). Here, the path coefficient between neighborhood disorganization and individual delinquency is not statistically significant as t-values and p values for this association have not met the minimum requirement criteria. So, H3 is not supported by the evidence.

4.4.1. Mediation Analysis. The results of the mediation analysis are given in Table 8. The direct effects of ACE score and neighborhood disorganization on delinquency are significantly mediated by peer delinquency. So, hypotheses H1a ($\beta = 0.146$, $t = 8.905$, $p < 0.001$) and H3a ($\beta = 0.094$, $t = 6.563$, $p < 0.001$) are accepted. Analyzing the relationship between the ACE score and delinquency, it is found that the direct effect and indirect effects of the ACE score on delinquency through the mediation effect of delinquent peer association are both significant. That is why delinquent peer association partially mediates the relationship between ACE score and delinquency. On the other hand, neighborhood disorganization does not directly affect delinquency, but it has a positive effect on delinquency through the mediation effect of peer delinquency. Therefore, peer delinquency fully mediates the relationship between neighborhood disorganization and delinquency.

4.4.2. Moderation Analysis. The results of the moderation analysis are presented in Table 9 and Figures 3 and 4. We used neighborhood social capital and neighborhood

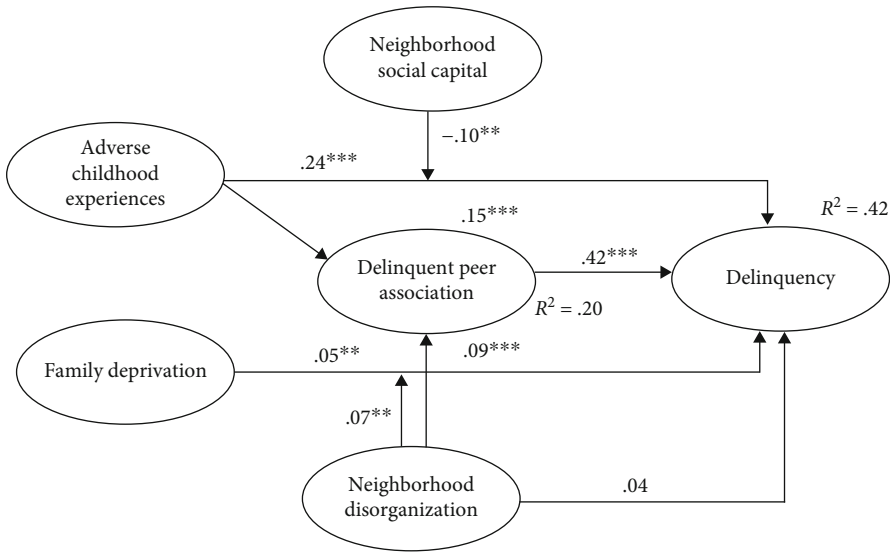

Figure 2: The output of structural equation modeling after bootstrapping. Note: $^{**}p < 0.05$ and $^{***}p < 0.001$.

Table 8: Mediation analysis.

Path	Total effect	t statistic	Sig	Direct effect	t statistic	Sig	Path	Indirect effect	t statistic	Sig
ACE score -> delinquency	0.386	11.165	<0.001	0.240	6.464	<0.001	ACE score -> delinquent peer association -> delinquency	0.146	8.905	<0.001
Neighborhood disorganization -> delinquency	0.138	5.612	<0.001	0.044	1.831	0.067	Neighborhood disorganization -> delinquent peer association -> delinquency	0.094	6.563	<0.001

Table 9: Moderation effects of neighborhood social capital on the relationship between ACE and DEL and neighborhood disorganization on family deprivation and delinquency.

	Path	β	Standard deviation	t statistic	p values	Decisions
H1b	ACE score -> delinquency	-0.099	0.044	2.276	0.023	Supported
H2a	Family deprivation -> delinquency	0.067	0.025	2.647	0.008	Supported

disorganization as moderator variables. It is seen that social capital has a significant negative effect on the relationship between ACE score and delinquency (H1b: $\beta = -0.099$, $t = 2.276$, $p = 0.023$). On the other hand, neighborhood disorganization has a significant positive effect on the relationship between family deprivation and delinquency (H2a: $\beta = 0.067$, $t = 2.647$, $p = 0.008$).

5. Discussion

This paper is aimed at assessing a model combining the proximal factors associated with students' delinquency using the framework of Richard Jessor's problem behavior theory. This research is one of those very few studies conducted in Bangladesh and Asia that made an effort to explain delinquency based on the concept of PBT. As this theory assumed that combined familial, societal, and neighborhood factors are essential to understanding delinquency properly, this study incorporated factors from these domains. Thus, this research included childhood adversity in the family domain and tried to understand its impact in the form of ACE with other factors. The findings indicate that ACE, family deprivation, and delinquent peer association affect juveniles' delinquency positively. Neighborhood disorganization does not affect delinquency directly but positively affects it through the full mediation effect of peer delinquency. Additionally, peer delinquency mediates the relationship between ACE and delinquency. Two neighborhood-level variables (neighborhood social capital and neighborhood disorganization) have moderating effects on two relationships of the model. Social capital negatively moderates the effect of ACE on delinquency, whereas neighborhood disorganization positively moderates the relationship between family deprivation and delinquency.

The result of the present analysis supports hypothesis 1 (H1), and it is aligned with previous studies. As per the explanation of Cicchetti and Toth [141], childhood adversity or childhood maladaptation drives juveniles to further

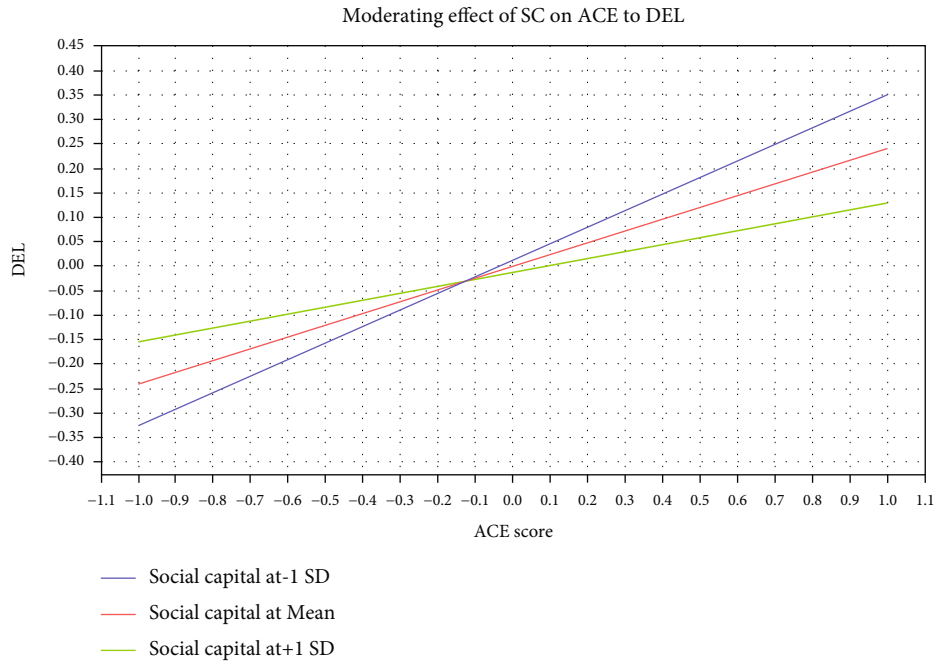

Figure 3: Moderating effect of social capital on the relationship between adverse childhood experience and delinquency. Note: SC = social capital; ACE = adverse childhood experience score; DEL = delinquency.

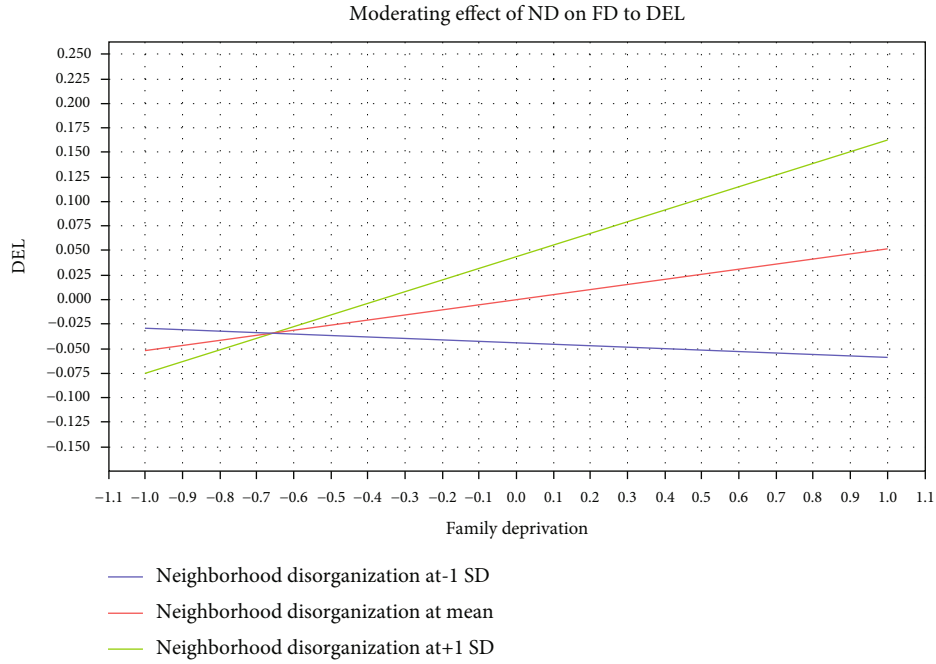

Figure 4: Moderating effect of neighborhood disorganization on the relationship between family deprivation and delinquency. Note: ND = neighborhood disorganization; FD = family deprivation; DEL = delinquency.

delinquency. Most of the previous research focused on any specific types of delinquency (for example, serious and violent delinquency) to understand the impact of ACE [68, 142], and they hardly considered other categories in those analyses. Many such studies were conducted on incarcerated or high-risk juveniles or those who already came in conflict with the law [5, 7]. So, the youngsters who did not come in contact with the law were less represented in those studies. In this research, we used a combination of four subscales of delinquency, including most of the common types of delinquencies for school students who are predominantly not identified as delinquents in the eyes of the law. In such case, this research adds value in understanding the impact of the summated score of ACE to understand its effect on

overall delinquency subscales of students while assessing Richard Jessor's idea of problem behavior theory. This study can also help law enforcement agencies and other stakeholders take a student-based initiative to address the issue and prevent delinquencies by counseling their families, guiding the students, or developing essential policies.

Present findings support hypothesis 2 (H2) that family deprivation positively affects delinquency. This variable is another family-level factor, but the respondents contrast to evaluate their own deprivation with others. It is also found to be a significant predictor of delinquency. It supports the existing literature that poverty or deprivation leads to delinquency. Vidal et al. [22] mentioned that families with more exposure to poverty have a greater possibility of encountering the criminal justice system. That indicates deprivation is a vital factor behind juveniles' involvement in antisocial activities. Lai [23] found that deprivation may drive committed juvenile offenders to violent misconduct. As poverty is connected to deprivation, a qualitative study conducted by Shong et al. [20] found that poverty generates three crime-enhancing issues related to delinquency. Fergusson et al. [18] also found that if children or juveniles are reared up in an environment with a disadvantaged socioeconomic situation, that increases both self-reported delinquency and official crime commissions. These findings can help professionals understand that students with a sense of deprivation have higher engagement in self-reported delinquency. So, social workers and other stakeholders can intervene to prevent the delinquency of students who come from disadvantaged families or feel deprived compared to others.

Present research does not support hypothesis 3 (H3) that neighborhood disorganization positively affects delinquency directly. Therefore, this result contradicts the findings of some studies regarding the direct effect of neighborhood disorganization on delinquency. For example, Chan [143] studied secondary school students and concluded that neighborhood disorganization leads to victimization and delinquency. Ford et al. [25] found that higher neighborhood leads to substance abuse. The reason for the contradiction is that in our research, we used different subscales of delinquency, while Chan [143] used them differently. Ford et al. [25] analyzed the effect of neighborhood disorganization on particular delinquency, like substance abuse. As our research considered all subscales together in structural equation modeling, including other delinquencies, it may be the reason behind this contradiction with Ford et al. [25]. The result may also contradict due to the contextual differences between Bangladesh and other countries as well. As the research participants were mostly students with official noncriminogenic records, this may also have an impact on the findings. However, our findings align with Caldwell et al. [144], who mentioned neighborhood disorganization as a weak predictor of delinquency.

The findings of this research support hypothesis 4 (H4) that associating with delinquent peers increases the probability of delinquency among other juveniles. This result supports previous related research conducted previously on incarcerated and nonincarcerated juveniles by Walters et al. [145, 146], Rudy et al. [36], Walters [145], Ragan et al. [147], Guo [148], Connolly et al. [38], Cho et al. [37], Defoe et al. [39], and Stults et al. [149]. Our findings for all subscales of peer delinquency are aligned with previous studies. This factor has been identified as the strongest predictor of all variables in the present research model in terms of its beta value. The findings are essential for the teachers, parents, and other stakeholders to understand the effect of delinquent peers among minors. To prevent delinquencies, it is not an excellent way to address only a particular juvenile but to address the peer groups to which one belongs. This outcome can help develop practical ideas to address delinquency by designing a peer-culture approach.

The present analysis supports hypothesis H1a that delinquent peer association acts as an important mediator between ACE score and delinquency. The total effect of mediation analysis shows that in the presence of delinquent peers, the ACE scores can affect delinquency more robustly. It supports the existing literature that due to family-related problems, juveniles may mix with delinquent peers [18, 21–23] and thus may expose delinquency [142, 150, 151]. The findings may help professionals understand the combined relationship between ACE and delinquency through the indirect effect of peer delinquency.

Our present research has also supported hypothesis H3a that delinquent peer association fully mediates the relationship between neighborhood disorganization and delinquency. Neighborhood disorganization does not predict delinquency directly, but it does through the mediation of delinquent peer associations. The findings of this study support the previous research of Cattarello [113] that the effect of neighborhood disorganization on delinquency is fully mediated by delinquent peer association. Previous studies found that neighborhood disorganization creates more opportunities to mix with delinquent peers to cope with stress [30]. Socializing with delinquent peers in this way can help explain delinquency's predictability by neighborhood disorganization. Our present study indicates that neighborhood disorganization and mixing with delinquent peers more intensely may predict students' delinquency. These findings can help identify more preventive measures to reduce the level of delinquency among juveniles based on their neighborhood. As the total number of research on this issue is relatively scant in the Asian context [31], this present research can contribute to the literature by filling this gap.

The present research result supports hypothesis H1b and aligns with the existing research that neighborhood social capital reduces the effect of ACE on delinquency while acting as a moderator. Social capital-related studies show that social capital negatively impacts delinquency [33, 152], whereas this research finds that neighborhood social capital can also act as a moderator to explain the relationship between ACE score and delinquency. In such a way, this result helps add value to academia by establishing it as a good moderator. It can also help policymakers devise new policies for increasing neighborhood social capital.

Hypothesis H2a is also supported by existing literature that neighborhood disorganization significantly moderates the relationship between family deprivation and

delinquency. As previous studies identified neighborhood disorganization as a predictor of delinquency, its positive effect as a moderator is completely aligned with previous research. Byrnes et al. [27] mentioned in their study that higher disorganization may increase serious and less serious delinquency. Those studies found that substance abuse [25], gambling [26], serious delinquency [27], violence [28], and other problem behaviors [29] are increased by neighborhood disorganization. Our present research has found parallel findings about neighborhood disorganization's effect on delinquency as a moderator while considering family deprivation as an exogenous construct. This outcome has established neighborhood disorganization as a potential moderator in the model and helps academicians to understand the relationship among different variables more intensely.

It is evident that a combination of different factors other than any single factor is associated with delinquency [1]. We considered the juvenile's early life trauma a combined form of family problems. We also considered family deprivation as another factor significantly affecting all the subscales of delinquency. The findings indicate that the more adversity and deprivation juveniles face, the more delinquent activities they are likely to be engaged in. That indicates that negative family experiences or deprivations promote all significant types of delinquency. For environmental factors, considering Jessor's concept of protective factor and risk factor, we found that neighborhood social capital works as a protective factor against delinquency. Also, as a risk factor, neighborhood disorganization intensified the delinquency predicted by family deprivation. Both of these neighborhood factors have moderating effects on delinquency. In the case of delinquent peer association (risk factor), this also significantly promotes all delinquent types or subscales either directly or as a mediator.

The study's findings ascertain the importance of proximal delinquency factors as predictors of delinquency among Bangladeshi students. Combining the main idea of Richard Jessor, this study incorporated the idea of childhood trauma and family deprivation within the perimeter of proximal factors of delinquency. Also, this study used the concept of Richard Jessor in the case of students who have not come predominantly from an environment with a "concentrated disadvantage" that Jessor's theory was tested in most cases previously. In this context, it can be stated that Jessor's theoretical perspective has received an extension and quite good acceptance in the context of Bangladesh for students, most of whom are not officially accused of committing any delinquent activities. To the best of our knowledge, less research has been undertaken to understand delinquency from this theoretical viewpoint in such a context. We expect that this academic contribution will enrich the delinquency-related literature both locally and globally. At the same time, the findings may play a role in understanding the validity and applicability of Jessor's theory in a South Asian context.

Along with other academic importance, the present research may indirectly trigger sustainability through its potential connection with different environmental and social factors. The implications can help create sustainable communities by addressing neighborhood social capital and disorganization [153–155]. It can also contribute to creating balanced and sustainable educational institutions [156–159] with the process of school monitoring and other support programs. In this way, the findings of this study may aid in establishing social, economic, cultural, and institutional sustainability [160, 161].

5.1. Limitations of the Study and Future Directions. This research was one of those very few researches conducted in Bangladesh and Asia that made an effort to explain delinquency based on childhood adversity and other proximal factors, aligning those with Richard Jessor's problem behavior theory. However, this research still has some limitations. The data for the present study were collected in a nonrandomized setting, which might affect the generalizability of the analysis. The data were also cross-sectional, where students were required to answer questions based on their memories for ACES or peer delinquency-related questions. This process may also affect the data quality. Future researchers can collect longitudinal data from other juveniles. They may also focus on the juveniles living in slum areas or other criminogenic environments. They may use different theoretical underpinnings to understand other variables and their effects on delinquency more intensely.

5.2. Countermeasures. For addressing the combined influence of multiple factors on students' delinquency, a concerted effort from various stakeholders is quite essential. Teachers can play a crucial role in this regard. They can guide the students through mentorship and peer awareness programs addressing ACEs and family deprivation [162]. Additionally, they can organize workshops for the parents to support a healthy family environment and make counseling services available for the students. These might enable the families and their children to deal with environmental hostility efficiently. For schools, incorporating different life skill educational programs and peer support programs in the curriculum may assist students in navigating their family and neighborhood-related challenges competently [163]. As vital influencers during children's upbringing, the parents should carefully guide their offspring to select their peer groups and take adequate measures to promote their neighborhood social capital [164]. At the community level, initiatives such as neighborhood improvement programs and youth recreational programs may help to reduce disorganization and promote social capital among neighbors [165]. In this way, by incorporating a comprehensive action plan with the help of different stakeholders, a safer family and community environment can be ensured for the students. This concerted effort may eventually help them to be less engaged in delinquent activities.

6. Conclusions

The study is aimed at apprehending juvenile delinquency with the consideration of family, neighborhood, and peer dynamics in Bangladesh through the lens of problem behavior theory. This study concludes that two family-level factors, ACE score and family deprivation, can predict delinquency. Two neighborhood-level factors, neighborhood

disorganization and neighborhood social capital, have moderating effects in the model to explain delinquency. Neighborhood social capital negatively moderates the relationship between ACE score and delinquency. On the other hand, neighborhood disorganization positively moderates the relationship between family deprivation and delinquency.

Delinquent peer association was found to have significant predictability to delinquency directly and as a mediator. It has a partial mediation effect on ACE score-led delinquency and a full mediation effect on neighborhood disorganization-led delinquency. Combining these family-related factors, neighborhood-level factors, and delinquent peer association, the overall proximal environment around juveniles strongly impacts juvenile delinquency. It is, therefore, evident that Richard Jessor's idea of combining these proximal factors is quite applicable in explaining juvenile delinquency among the students of Bangladesh as well.

This research is one of the few studies of Bangladesh that intensely focused on the novel and multifaceted perspective of family and neighborhood dynamics in understanding the delinquency of Bangladeshi students. While previous research mainly assessed the effect of isolated factors in understanding minors' delinquent exposure, this study adopted Richard Jessor's problem behavior theory (PBT) [41, 44] to understand the complex interplay of ACE, family deprivation, neighborhood perspective, and delinquent peer association in this regard. Integrating different factors using structural equation modeling gave us a holistic approach to understanding different factors and their interconnectedness in apprehending delinquency. Furthermore, this study explored the Bangladeshi context of students' delinquency from a unique perspective to contribute to this region's limited academic literature. Overall, this research uniquely contributes to exploring the complex interconnectedness of proximal factors in the criminology and social sciences field. It is to be mentioned that this study used a nonrandomized sampling strategy and cross-sectional and student-based data for the present analysis, which may affect the generalizability of this study. However, future studies incorporating probability sampling and longitudinal data incorporating more proximal and distal factors in slum areas or places with improper settlements may reveal interesting findings.

The findings of the present study indicate the urgency for different stakeholders to take necessary measures to prevent students' delinquency in Bangladesh. In this case, school-based mentorship programs, peer awareness programs, life skill educational programs, parental involvement and support, community-based initiatives, and stakeholder collaboration may be helpful for the juveniles [162–165]. Additionally, the country-level statistical office of Bangladesh, the Bangladesh Bureau of Statistics (BBS), may collect regular data about childhood adversity and other community factors to understand the situational risk factors for students' delinquent exposures. The Department of Social Services may implement different prevention programs based on the statistical data with the help of parents, schools, and other community stakeholders to prevent delinquency more efficiently.

Data Availability

Data will be available upon reasonable request.

Consent

Written informed consent has been obtained from the Department of Social Services, Ministry of Social Welfare, Bangladesh.

Conflicts of Interest

The authors declare no conflict of interest.

Authors' Contributions

B.U. and T.Y. contributed to the conceptualization. B.U. contributed to the methodology. B.U. provided the software. B.U. and T.Y. were responsible for the validation. B.U. carried out formal analysis. B.U. contributed to the investigation. B.U. and T.Y. provided the resources. B.U. was responsible for data curation. B.U. wrote the original draft preparation. T.Y. wrote, reviewed, and edited the manuscript. B.U. contributed to the visualization. T.Y. contributed to the supervision. B.U. was responsible for the project administration. All authors have read and agreed to the published version of the manuscript.

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